

# DMS Client Server Interface Design Alain Petit

apetit@eos.hitc.com

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## **Client Server Interface Overview**

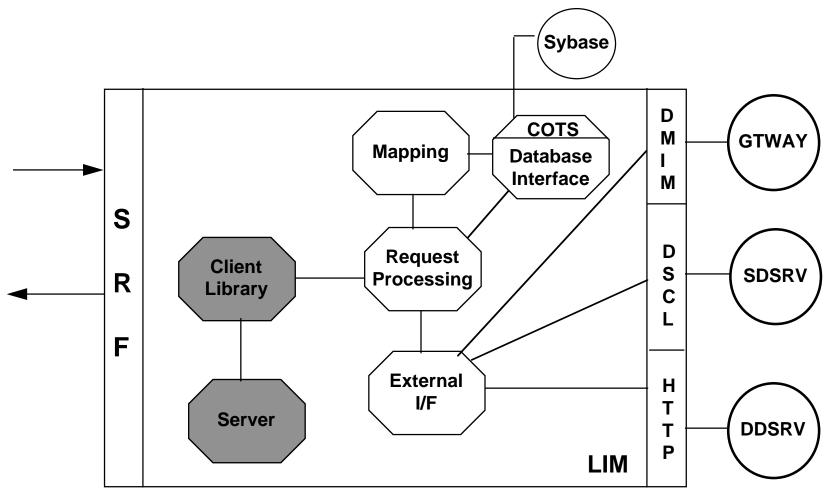


## **Agenda**

- Client Server Architecture Overview
- Object Models
- Scenarios & Event Traces

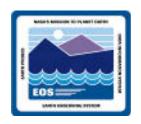
## LIM CSC Software Architecture

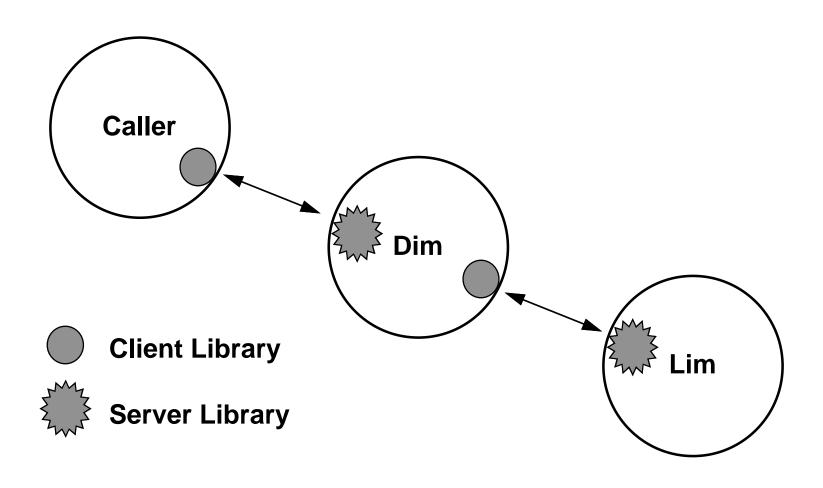




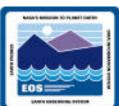
DMIM = Data Management Client Library, DSCL = Data Server Client library, HTTP = HTTP public domain library SRF = Server Request Framework

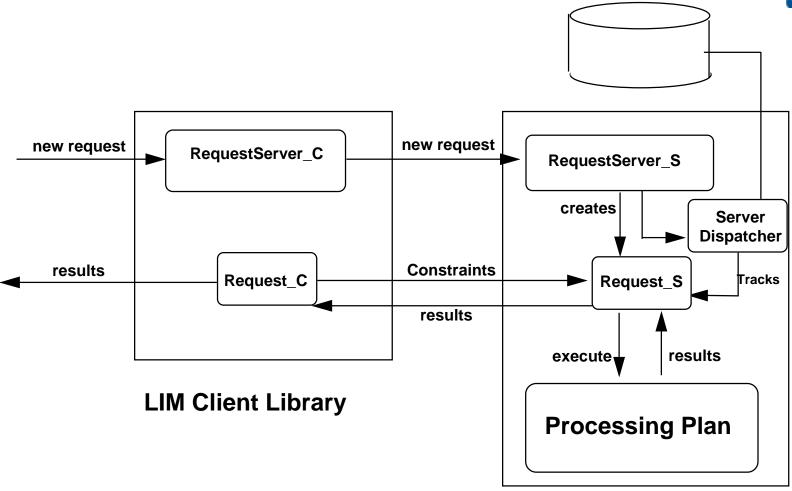
## **DMS Client - Server Library Architecture**





## LIM Client Server Architecture





**LIM Server Library** 

## **Object Model**



The following object models will be reviewed:

**Diagram Name Document Reference** 

DmImClient 305-CD-023-002 Section 5.7, pp 5-401 to 5-413

**DmImServer** Enclosed

## **Scenarios & Event Traces**



#### **DMS Client-Server event traces:**

**Event Trace Name Diagram Name Document Reference** 

Search Query DIMGR\_QUERY\_SUBMISSION 313-CD-006-002 pp 4-77 to 4-78

Result DIMGR\_RESULT\_RETRIEVAL 313-CD-006-002 pp 4-79 to 4-80

Session management DIMGR\_SESSION\_MANAGEMENT

Browse Request DIMGR\_BROWSE\_REQUEST

Acquire Request DIMGR ACQUIRE REQUEST

The following sample event traces will be reviewed:

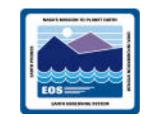
Event Trace Name Diagram Name Document Reference

Search Query DIMGR\_QUERY\_SUBMISSION 313-CD-006-002 pp 4-77 to 4-78

Result DIMGR\_RESULT\_RETRIEVAL 313-CD-006-002 pp 4-79 to 4-80

Note: The same scenarios and event traces hold for the DIM, LIM and GTWAY.

## **Search Query**



<u>Diagram Name</u> DIMGR QUERY SUBMISSION **Document Reference**313-CD-006-002 pp 4-77 to 4-78

#### **Scenario**

 This scenario primitive shows how a client submits a search request to the DIMGR. This scenario primitive involves two CSCIs: A requesting CSCI (Release B Client) and DIMGR.

#### **Assumptions/ Preconditions**

- Connection to server already established
- User is authorized to connect to server
- Search Query constructed using the Data Dictionary

#### **Functional Description**

- client connects to the server
- client calls for a new request
- client pass the search constraints to request object
- client set the callback function to the request object
- client submit the search

Note: The same scenarios and event traces hold for the DIM, LIM and GTWAY.

## **Result Retrieval**



#### DIMGR\_RESULT\_RETRIEVAL

313-CD-006-002

pp 4-77 to 4-78

#### Scenario

• This scenario primitive shows how the Client retrieves data from the DIMGR, after the DIMGR has merged data results from the SDSRVs involved.

#### **Assumptions/ Preconditions**

- This scenario assumes that the following preconditions exist:
  - The server side object was constructed and is listening for requests
  - 2. A search request was initiated
  - 3. A callback was set by the calling object
  - 4. A search was submitted

### **Functional Description**

- request at server side receive results
- request at server side creates result message object and send it to client
- request at client side receive result message object
- request at client side notifies client with callback function supplied by client
- client gets results from request object at client side.

Note: The same scenarios and event traces hold for the DIM, LIM and GTWAY.